

L 21189-66
ACC NR: AP6008051

can be interpreted. It is shown that factors which increase the concentration of free electrons or MnO_4^- ions in the permanganate lattice cause a decrease in the rate of thermal decomposition (e. g., the introduction of manganate ion into potassium and cesium permanganate crystals by cocrystallization from aqueous solutions). The solid radiolysis product catalyzing the thermal decomposition of irradiated permanganates is thought to be MnO_2 and the acceleration effect results from the combination of the following factors acting in two opposite directions: the accelerating effect of MnO_2 and inhibiting effect of MnO_4^- , both of which are formed during the radiolysis of permanganates. The paper was presented by Academician V. V. Voyevodskiy on 7 June 1965. Orig. art. has: 1 figure.

SUB CODE: 07/ SUBM DATE: 11May65/ ORIG REF: 010/ OTH REF: 011

Card 2/2 dda

S/552/60/000/027/001/008
H000/H000

AUTHOR: Oblogina, T. I.

TITLE: A new method of determining the absorption coefficient of seismic waves

SOURCE: Prikladnaya geofizika (sbornik statey), no. 27, 1960, 3-11

TEXT: The coefficient of absorption of a seismic wave can be determined from the expression $A_x^n = C \cdot e^{-\alpha x}$; A -- amplitude of the wave; C -- a constant; n -- index of dispersion; and x -- distance from the shot point, when x is sufficiently great. It is shown that α can be found by determining the intersection point of the asymptote of a family of functions $y = f(x)$ with the x-axis, where $f(x) = \ln A(x) / x = \ln C/x - n \ln x/x - \alpha$. This asymptotic method is important because it does not require that the index of dispersion be known, but enables the coefficient of absorption α to be determined from a single curve of amplitudes instead. There are 5 figures and 1 table.

Card 1/1

OBLIYAROV, D.O.

Endemic goiter in Kashka-Darya Province. Izv. AN Uz. SSR. Ser.
med. no.1:23-27 '58.
(MIRA 12:7)

1.Respublikanskiy protivozobnyy dispanser.
(KASHKA-DARYA PROVINCE--GOITER)

OBLIYAROV, D.O.

Thyroid gland function in Tashkent school children. Med. zhur.
Uzb. no.12:50-53 D '60. (MIRA 14:1)

1. Iz laboratorii endemicheskogo zoba Instituta krayevoy i
eksperimental'noy meditsiny AN UzSSR (direktor - G.M. Makhlumov,
nauchnyy rukovoditel' - prof. S.A. Masumov).
(TASHKENT--THYROID GLAND--DISEASES)

OBLIYAROV, D.O.

Results of the 10-day meeting on endocrinology and the conference
of the Ukrainian Institute of Experimental Endocrinology. Med. zhur.
Uzb. no.1:78-80 Ja '61. (MIRA 14:6)
(ENDOCRINOLOGY CONGRESSES) (CHILDREN-DISEASES)

OBLIYAROV, D.O.

Results of iodine prophylaxis in the endemic enlargement of the thyroid gland in Tashkent school children. Med. zhur. Uzb. no.5:
23-25 My '61. (MIRA 14:6)

1. Iz laboratorii endemicheskogo zoba Instituta krayevoy eksperimental'noy meditsiny An UzSSR (nauchnyy rukovoditel' - prof. S.A. Masumov).

(TASHKENT--THYROID GLAND--DISEASES)
(IODINE--THERAPEUTIC USE)

OBLIYARO, DCO.

Dynamics of endemic goiter in the Fergana valley according to data from repeated investigations. Med. zhur. Uzb. no.6:56-59 Je '61.
(MKRA 15:1)

1. Iz laboratorii endemicheskogo zoba Inst~~ituta~~ krayevoy eksperimental'noy meditsiny AN UzSSR (nauchnyy rukovoditel' raboty - prof. S.A.Masumov).
(FERGANA GOITER)

OBLIYAROV, D.O.

Functional state of the thyroid gland in the Tashkent school
children. Trudy Inst. kraev. eksper. med. no.4:69-72'62.
(MIRA 16:6)
(TASHKENT—THYROID GLAND—DISEASES)

SERBINOVICH, P.P.; BOLDYREV, A.K., kand. tekhn. nauk, retsenzent;
OSIPOV, G.L., kand. tekhn. nauk, retsenzent; IL'INSKIY,
V.M., kand. tekhn. nauk, retsenzent; OBLIZINA, N., red.

[Principles of structural physics; a textbook for students
specializing in construction at the All-Union Engineering
and Construction Correspondence Institute] Osnovy stroitel'-
noi fiziki; uchebnoe posobie dlja studentov stroitel'nykh
spetsial'nostei VZSI. Moskva, 1963. Sec.1-3.

(MIRA 17:8)

1. Moscow. Vsesoyuznyy zaochnyy inzhenerno-stroitel'nyy
institut. Kafedra arkhitektury.

OBLOGINA, T. I.

"The Dynamic Nature of Seismic Waves in the Case of Diffraction."
Cand Geol-Min Sci, Moscow State U, 24 Dec 54. (VM, 14 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (12)
SO: Sum. No. 556 24 Jun 55

Oblogina T I

Y-4E46

1-FW

✓ Oblogina, T. I. Dynamic characteristics of diffracted
waving waves. Izv. Akad. Nauk SSSR. Ser. Geofiz.

1956, 377-390. (Russian)

The author determines the dynamical hodograph of
elastic waves diffracted by various geometrical con-
figurations. Both two- and three-dimensional cases are
considered, and the results are depicted in several graphs.
Theoretical seismograms of different pulse forms (im-
pinging) are also obtained. The mathematical method of
analysis is attributed to A. F. Filippov [Dissertation,
Moskov. Gos. Univ., 1953; not available to the reviewer].
Some aspects of the present work are also related to
Skuridin's methods [Izv. Akad. Nauk SSSR. Ser. Geofiz.
1955, 3-16; MR 17, 319]. K. Bhagwandin (Oslo).

MF
Skuridin

EE
MT

OBLOGINA, T.I.

PHASE I BOOK EXPLOITATION 1077

Prikladnaya geofizika; sbornik statey, vyp. 20 (Applied Geophysics; Collection of Articles, v. 20) Moscow, Gostoptekhizdat, 1958. 267 p. 3,000 copies printed.

Sponsoring Agency: Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki.

Ed.: Polshkov, M.K.; Executive Ed.: Kuz'mina, N.N.; Tech. Ed.: Solomonidin, S.M.

PURPOSE: This collection of articles is published for scientific, engineering and technical personnel interested in problems of applied geophysics.

COVERAGE: These articles are concerned with the methodology of interpreting the results of gravimetric, seismic and electrical surveys. A new method of depth finding using ultrasonic principles is described in the article by L.A. Sergeyev. Other articles review the collecting properties of rocks on the basis of data obtained from resistometers and the application of charged particle accelerators in well logging.

Card 1/ 4

Applied Geophysics; Collection of Articles, v. 20)

1077

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| Applied Geophysics; Collection of Articles , v. 20 | 1077 |
| Kotlyarevskiy, B.V. Evaluation of Accuracy of Gravimetric Observations, Selection of a Rational Density Grid of Observations and Cross-sections of Iso-anomalies of Gravity | 109 |
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AVAILABLE: Library of Congress

Card 4/4

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"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001237710010-9

OBLOGINA, T.I.

Diffracted seismic waves. Prikl. geofiz. no. 20:26-45 '58.
(Seismology) (MIRA 11:11)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001237710010-9"

OBLOGINA, T. I.

New method of determining the absorption coefficient of seismic waves. Prikl. geofiz. no.27:3-11 '60. (MIRA 13:12)
(Seismic prospecting)

OBLOGINA, T.I.

Some characteristics of wave amplitudes with steeply dipping
division borders. Vest.Mosk. un. Ser. 4: Geol. 16 no.2:52-60
Mr-Ap '61. (MIRA 14:4)

1. Kafedra geofiziki Moskovskogo universiteta.
(Seismic prospecting)

9.9865

(1109, 1327) 7406

AUTHOR:

Oblogina, T. I.

33052

S/169/61/000/012/019/089
D228/D305

TITLE:

A new means of determining the coefficient of absorption of seismic waves

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 12, 1962,
27, abstract 12A270 (V sb. Prikl. geofizika
no. 27. M., 1960, 3-11)

TEXT: At sufficiently large distances x from the detonation point, the coefficient of absorption α is determined from the expression $A x^n = C \exp(-\alpha x)$, where A is the wave amplitude, C is a constant, and n is the index of divergence. It is shown that the calculation of α is connected with the sought point of intersection of the asymptote of the set of functions $y = f(x)$ with the y -axis, where $f(x) = \ln A(x)/x = \ln C/x - n \ln x/x - \alpha$. This method does not

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Card 1/2

A new means of.

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D228/D305

require knowledge of the magnitude of the index of divergence
n. Abstracter's note: Complete translation.

+

Card 2/2

OBLOGINA, T.I.; PIYP, V.B.; KOCHIAY, S.

Using seismic methods to study intrusives. Izv. AN SSSR. Ser.
geofiz. no.9:1191-1205 S '62. (MIRA 15:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Seismic prospecting)

OBLOGINA, T.I.

Boundary value problem for a nonlinear differential equation of
the second order with delay. Trudy Sem. po teor. diff. urav. i
otklon. arg. 2:234-237 '63.

(RMF-120)

ACCESSION NR: AP4014024

S/0049/64/000/001/0020/0028

AUTHOR: Oblogina, T. I.

TITLE: The form and spectrum of diffracted waves

SOURCE: AN SSSR. Izv. Seriya geofizicheskaya, no. 1, 1964, 20-28

TOPIC TAGS: diffracted wave, diffracted wave spectrum, diffracted wave form, incident wave, longitudinal wave, wave function, wave front

ABSTRACT: The author bases her work on the following premises: that the spectrum of the wave is completely determined by its form; that by wave form it is understood that the displacement $u(t, x, y)$, $v(t, x, y)$ depend on time t at a fixed point (x, y) ; that consideration is given only to the longitudinal incident and diffracted waves; that the wave form of the incident waves is known by a certain function; and that the form of the diffracted wave is found from an asymptotic representation of displacement in the vicinity of the front of the diffracted wave. Results indicate that the form of the diffracted wave is expressed by an integral on the order of one-half the function describing the form of the incident

Card 1/2

ACCESSION NR: AP4014024

wave. The composite spectrum of the diffracted wave is equal to the composite spectrum of the incident wave multiplied by $1/\sqrt{J\omega}$. The author concludes that the indicated properties of the diffracted wave permit one by simple computation to determine the form and spectrum of such a wave from the known form and spectrum of the incident wave. Orig. art. has: 3 figures and 23 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 10Apr63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: AS, PH

NO REF Sov: 007

OTHER: 000

Card 2/2

OBLOGINA, T.I.

Using the amplitude curves of seismic waves in investigating
intrusions. Vest. Mosk. un. Ser. 4:98-100 My-Je '64.
(MIRA 17:12)

1. Kafedra geofiziki Moskovskogo universiteta.

L 60272-65 EWT(1)/EWA(L) Pub GW
ACCESSION NR: AP5017790

UR/0387/65/000/005/0007/0011
550.834

16

15

B

AUTHOR: Oblogina, T. I.

TITLE: An inverse problem of geometric propagation of seismic waves in inhomogeneous media

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 5, 1965, 7-11

TOPIC TAGS: seismic wave, wave velocity, geophysical prospecting, Dirichlet problem

ABSTRACT: On the basis of a travel time curve $t(x)$, the velocity $v(y)$ of seismic waves has generally been determined on the assumption that this velocity depends only on the single coordinate y (depth) and is a steadily increasing function of this depth. In the present work the author considers the problem of determining the velocity $v(x,y)$ in an inhomogeneous section as a function of two variables x and y (horizontal and vertical coordinates). On the assumption that $\log 1/v(x,y)$ is a harmonic function, this problem reduces to the Dirichlet problem for a half-plane. For the boundary condition it is necessary to know the distribution of emergent angles of the seismic rays and the independent distribution of

Card 1/2

L 60272-65

ACCESSION NR: AP5017790

apparent velocities along the earth's surface. The problem is clearly solved by means of the Poisson integral. This method may prove to be a useful tool in interpreting seismic data if the computations are made by an electronic computer. Orig. art. has: 18 formulas.

ASSOCIATION: Geologicheskiy fakultet, Moskovskiy gosudarstvenny universitet im. M. V. Lomonosova (Geology faculty, Moscow State University)

SUBMITTED: 13Jun64

ENCL: 00

SUB CODE: ES, MA

NO REF Sov: 006

OTHER: 000

False
Card 2/2

L 32166-66 EWT(1) GW

ACC NR: AP6010062

SOURCE CODE: UR/0387/66/000/003/0024/0032

AUTHOR: Ologina, T. I.; Piyn, V. B.35
B

ORG: Geological Department, Moscow State University im. M. V. Lomonosov (Geologicheskiy fakul'tet, Moskovskiy gosudarstvennyy universitet)

TITLE: Study of the kinematic properties of waves in nonuniform media

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 3, 1966, 24-32

TOPIC TAGS: seismic wave, propagation, propagation velocity, hodograph

ABSTRACT: Calculations were made for the ray structure, fronts and hodographs of seismic waves as a function of two coordinates for dimetric media having a variable propagation velocity $v(x,y)$. The velocity characteristics of the nonuniform media were obtained as functions of the velocity and velocity gradient fields. Differential equations were related to these fields for calculation of the ray structure and a combined graphical-analytical method was developed to solve the equations. For seismic waves moving through media with a velocity

$$v(x,y) = v_0 \exp(k_1 \operatorname{arctg} x + k_2 \operatorname{arctg} y),$$

scalar velocity fields and vector fields of the velocity gradients were given as a func-

UDC: 550.834

Card 1/2

L 32166-66

ACC NR: AP6010062

tion of x - y coordinates. Isochronic curves were constructed for sections along which the velocity varied linearly and these were plotted jointly with the hodographs. The shapes of these curves were explained on the basis of the boundary conditions. The velocity field and the velocity gradient field characterized the velocity distributions in the media and their rate of increase or decrease in any arbitrary direction. The trajectories of seismic rays in nonuniform media were described by second order differential equations with variable coefficients and the above semigraphical method of solution relied on a geometrical interpretation of these equations. Orig. art. has: 5 figures, 1 table, 16 formulas.

SUB CODE: 08/ SUBM DATE: 10May65/ ORIG REF: 005

Card 2/2 *[Signature]*

OBLOGINA, YE. YA.; ODNOLETKOVA, YE. F.

Diagnosis, Radioscopic

Roentgen diagnosis of gastro-intestinal tuberculosis. Prosl. tbc., No. 1, 1951.

Monthly List of Russian Accessions, Library of Congress, March 1954. UNCLASSIFIED.

MANDEL'SHTAM, F. N.; OLODORINA, M. I.A.

Phrenic Nerve - Surgery

Significance of kymographic investigation of the lungs in the study of the mechanism of phrenectomy. Probl. tub. No. 4, 1/52.

9. Monthly List of Russian Accessions, Library of Congress, December 1957, Uncl.
2

MANDIL'SHTAM, F. M.: OBLOGINA, Ye. Ya.

Tuberculosis

Significance of kymographic investigation of the lungs in the study of the mechanism of phrenicotomy. Probl. tub. No. 4, 1952

9. Monthly List of Russian Accessions, Library of Congress, December 1952 Uncl.

PLAVNIK, M.S., kandidat meditsinskikh nauk; OBLOGINA, Ye.Ya.

Effect of pneumoperitoneum on diaphragm motility. Probl. tub.
no.5:24-28 S-O '54. (MLRA 7:12)

1. Iz rentgenovskogo otdeleniya (zav.prof. K.V.Pomel'tsov)
Moskovskogo oblastnogo nauchno-issledovatel'skogo tuberkuleznogo
instituta (dir. prof. F.V.Shebanov)
(DIAPHRAGM, physiology,
motility in artif. pneumoperitoneum)
(PNEUMOPERITONEUM, ARTIFICIAL,
eff. of diaphragm motility)

ASEEV, D.D., professor; BERLIN, I.I., professor; VOZNESENSKIY, A.N., professor; SOROKIN, I.E., professor; UGRYUMOV, B.P., professor; TOPCHAM, A.B., professor; AGAPKIN, I.H., kandidat meditsinskikh nauk; AGRACHEV, G.I., kandidat meditsinskikh nauk; AL'TSHULER, N.S., kandidat meditsinskikh nauk; BRENZON, Ya.Ye., kandidat meditsinskikh nauk; ZORIN, Ye.N., kandidat meditsinskikh nauk; KOROVINA, Yu.P., kandidat meditsinskikh nauk; KOSITSKIY, G.I., kandidat meditsinskikh nauk; MANDEL'SHTAM, F.M., kandidat meditsinskikh nauk; MOCHALOVA, T.P., kandidat meditsinskikh nauk; OBLOGINA, Ye.Ya., kandidat meditsinskikh nauk; PATSKHVEROVA, A.G., kandidat meditsinskikh nauk; POKOTILOV, K.Ye., kandidat meditsinskikh nauk; ROZANOVA, M.D., kandidat meditsinskikh nauk; SAKHAROV, A.M., kandidat meditsinskikh nauk; YASHCHENKO, T.N., kandidat meditsinskikh nauk

"Tuberculosis"; handbook for physicians edited by Z.A.Lebedeva and N.A.Shmelev. Reviewed by D.D.Azeev and others. Probl.tub. 34 no.2: 76-80 Mr-Ap '56. (MLR 9:8)
(TUBERCULOSIS) (LEBEDEVA, Z.A.) (SHMELEV, N.A.)

OBLOJ, J.

✓ 1736 Improvement of Montana Wax. J. Obloj and S.
Bogucki. (Polish.) Przeglad Chemiczny, v. 35, no. 10, Oct.
1963, p. 494-503.

Discusses second extraction of wax with organic solvents to
reduce the content of resins to 15%, refinement, oxidation, and
further esterification of acid waxes obtained during refinement.
Tables, graphs, micrographs.

OBLOJ, J.

"From a So'ourn in the German Democratic Republic", p. 508, (PRZEMYSŁ CHEMICZNY,
Vol. 10, No. 10, Oct. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (REAL), LC, Vol. 4, No. 5, May
1955, Uncl.

1163

033.12.07

Obóz J. Investigation of the Synthesis of Fatty Acids.

"Badania nad syntezą kwasów tłuszczykowych". Przemysł Chemiczny,
No. 8, 1955, pp. 457-462, 8 figs., 4 tabs.

A description of the results of investigations over the synthesis of fatty acids from paraffin wax. The influence of temperature, of air flow velocity, and of the addition of catalyst on the oxidation rate and the properties of products studied, emphasis being placed on the high losses of raw material, when the unsaponifiable parts were separated from soaps by distillation at higher temperatures and on the advantages of extraction with solvents. The properties of the raw fatty acids obtained and of their different fractions are given.

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OBLOJ, C

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Chem
✓ The synthesis of fatty acids. J. Obloj (Inst. Syntezy Chem., Katowice, Poland). Przemysł Chemiczny, 34, 457-62 (1955) English summary).—The catalytic oxidation of paraffin wax to fatty acids was studied at atm. pressure in the range 100-60°. Better results were obtained with 0.15% KMnO₄ as catalyst than with Ca palmitate or Ba stearate. The optimum conditions are: 120-40°, space velocity of air 60-80 l./hr./kg. of wax, time of reaction 18-25 hrs. Since distn. diminishes the quality of products sepd. from substrates, extn. with org. solvents is the best method of sepn.

A. Kreglewski

RM
R&K

Oblej, J.

POLAND/Chemical Technology - Chemical Products and Their
Application, Part 3. - Fats and Oils, Waxes,
Soaps, Detergents, Flotation Agents.

H-24

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 22889

Author : J. Oblej

Inst :

Title : Research Work in Sphere of Fatty Acid Synthesis.

Orig Pub : Przem. chem., 1955, 11, No 8, 457-462

Abstract : The catalytic liquid phase oxidation of paraffin into fatty acids under atmospheric pressure at 100 to 160° was studied. The best results were obtained in the presence of 0.15% of KMnO₄, the results were worse with the application of Ca palmitate or Ba stearate. The most favorable conditions are: 120 to 140°, air passing through at the rate of 60 to 80 lit per hour per 1 kg of paraffin, the reaction duration 18 to 25 hours. The amount of oxyacids and esters rises, if the duration of air blowing was longer

Card 1/2

| | | | |
|------------|---|--|-------|
| COUNTRY | : | Poland | R-23 |
| CATEGORY | : | | |
| ABS. JOUR. | : | RZKhim., No. 5 1960, No. | 20077 |
| AUTHOR | : | Obloj, J., Beres, J., Gortel, Z., and Szczurek, K. | |
| INST. | : | Not given | |
| TITLE | : | Polyethylene. I. Commercial Production Processes, Properties, and Applications of Polyethylene | |
| ORIG. PUB. | : | Przemysl Chem., 57, No 11, 706-710 (1958) | |
| ABSTRACT | : | A review article. The production of polyethylene under high, medium, and low pressures is discussed. The bibliography lists 37 titles. L. Sedov | |
| CARD: 1/1 | | 389 | |

OBLAJ, J. - PERES, J. - SZCZUREK, M.

Polypropylene. p. 78

PRZEMYSŁ CHEMICZNY. (Ministerstwo Przemysłu Chemicznego i Stowarzyszenie
Naukowo-Techniczne Inżynierów i Techników Przemysłu Chemicznego) Warszawa,
Poland. Vol. 38, no. 2, February, 1959

Monthly List of East European Accessions (ELAI) LC, Vol 8, no. 8,
August, 1959 Uncl.

OBLOJ, Jozef; NOWAKOWSKA, Maria; BEDWARCZYK, Julita

Studies on the influence of certain impurities of ethylene
upon its polymerization process without pressure. ~~Polymer chem~~ 39 no.5:
269-272 May '60.

1. Zaklad Olefin, Instytut Ciezkiej Syntezy Organicznej, Blachownia
Slaska.

P/014/61/040/005/002/002
D227/D305

AUTHORS: Obłój, Józef, Nowakowska, Maria, and Bednarczyk, Julita

TITLE: Effects of impurities on the polymerization of ethylene without pressure

PERIODICAL: Przemysł chemiczny, v. 40, no. 5, 1961, 269-272

TEXT: The effects of C₂H₂, O₂, CO, CO₂, Et₂O and moisture impurities were studied to determine the permissible concentrations of these compounds when polymerization is catalyzed by organometallics. Very little data are to be found in pertinent, technical literature. According to K. Ziegler (Ref. 1: Die Makromolekulare Chemie (Macromolecular Chemistry), 18/19, 186, 1956), organometallic catalysts are poisoned by CO and C₂H₂; D.S. Breslow (Ref. 2: J.A.C. S., 79, 5072, 1958) using dicyclopentadienyl dichloro-titanium/diethyl chloro-aluminum as catalyst found that traces of oxygen facilitate polymerization of ethylene, and A.V. Topchiyev, B.A.



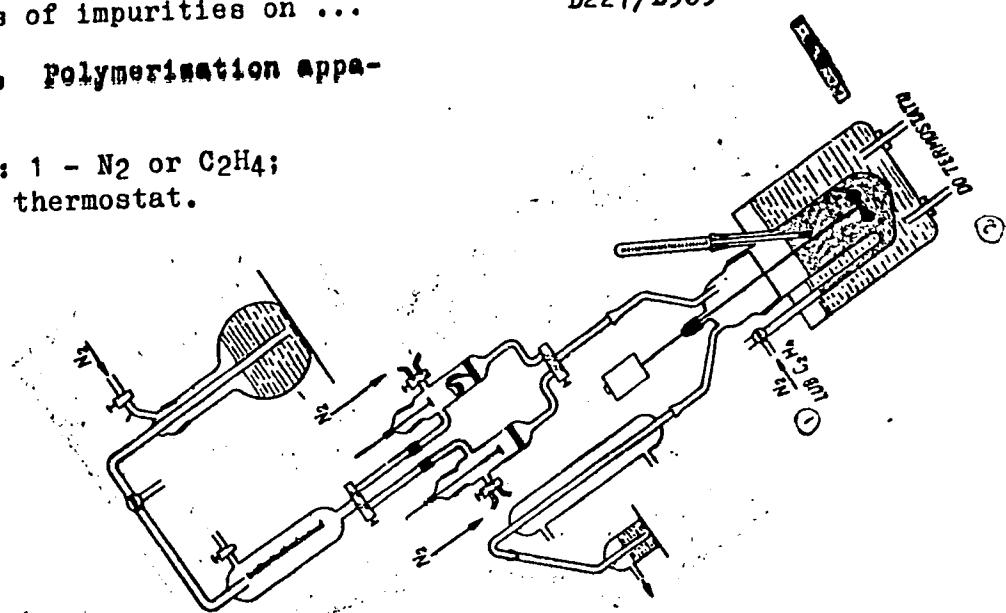
Card 1/14

Effects of impurities on ...

P/014/61/040/005/002/002
D227/D305

Fig. 1. Polymerisation apparatus.

Legend: 1 - N₂ or C₂H₄;
2 - to thermostat.



Card 2/14

P/014/61/040/005/002/002
D227/D305

Effects of impurities on ...

Krentsel', and L.G. Sidorova (Ref. 3: DAS USSR, 128, 732, 1959) discovered a similar effect with propylene and a $\text{Al}(\text{Et})_3/\text{TiCl}_4$ catalyst. Organic derivatives of aluminum are attacked by moisture and oxygen. The apparatus employed in the present work is shown in Fig. 1. Standard ethylene, ($> 99.0 \text{ C}_2\text{H}_4$, $< 0.01 \text{ O}_2$, 0.0095 CO , $< 0.001 \text{ C}_2\text{H}_2$, < 0.02 ethers and $< 0.045 \%$ of water, by weight), was mixed with each impurity in turn and passed into the polymerizing chamber containing a solution of the catalyst $(\text{Al}(\text{Et})_2\text{X})$ and TiCl_4 , where $\text{X} = \text{Cl}$ or Br) in benzene. The molar ratio Al:Ti was chosen to yield polyethylene with a reduced viscosity value ($\eta_{\text{red.}}$) equal to $2\text{X} \cdot \eta_{\text{red.}}$ is defined by

$$\eta_{\text{red.}} = \frac{\eta_{\text{solution}} - \eta_{\text{solvent}}}{\eta_{\text{solvent}}} \cdot C$$

where C = concentration in $\text{g}/100\text{ml} = 0.5$. The overall concentration of the catalyst was $0.18 - 0.50 \%$ by weight. The qualities measured were the decrease in $\eta_{\text{red.}}$, changes in polymer yield and

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Effects of impurities on ...

the relative consumption of catalyst, a , defined by the ratio of catalyst consumption in the particular experiment to that in polymerization of standard ethylene without any additions. The effect of acetylene impurities was studied in two series of experiments, varying concentration of the catalyst and the ratio $\text{Al}(\text{Et})_2 \text{Br} : \text{TiCl}_4$. Catalyst consumption increases gradually with increasing C_2H_2 content, while η_{red} falls rapidly for up to 0.066 % C_2H_2 (by 63 %) and is little affected thereafter. The results are shown in Table 1 and Fig. 2. Effects of oxygen were studied with an 0.5% solution of the catalyst (by weight) and $\frac{\text{Al}}{\text{Ti}}$ equalled 1.7 moles/mole

(Table 1 and Fig. 3). Up to ~ 0.066 %, oxygen has little effect on a , but the latter increases considerably at 0.24 % O_2 and at 0.66% O_2 the reaction is practically inhibited. η_{red} decreases more slowly than with increasing acetylene content. From Table 1 and Fig. 4 it may be seen that pure, dry carbon monoxide has practi-

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Effects of impurities on ...

Table 1.

Legend: 1 - Series; 2 - impurities in ethylene; 3 - type; 4 - amount (wt. %); 5 - yield of polymer g; 6 - relative consumption of catalyst a; 7 - η red.; 8 - remarks; 9 - acetylene; 10 - acetylene; 11 - oxygen; 12 - carbon monoxide; 13 - carbon dioxide; 14 - catalyst concentration = 0.5% by wt.; 15 - catalyst concentration = 0.18% by wt.; 16 - ratio Al : Ti = 1.3 : 1.

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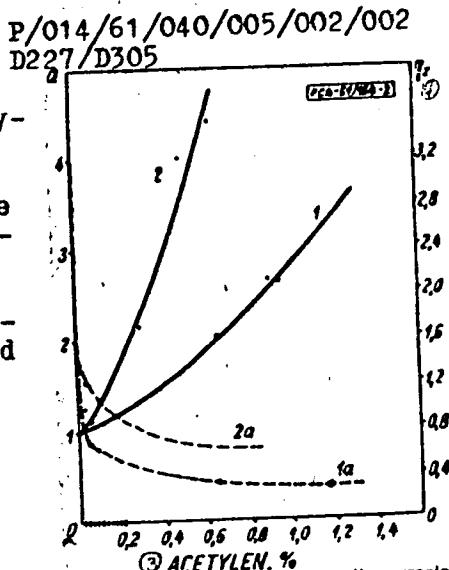
| ① Zanieczyszczenia Series | ② rodzaj rodzaj | ③ % wag. | ④ Względne względne stężenie katalizatora a | ⑤ Uwagi | ⑥ stężenie 0.5% wag. | ⑦ stężenie 0.18% | ⑧ stężenie 0.18% | ⑨ stężenie rat. Al : Ti = 1.3 : 1 |
|---------------------------------|-----------------------|-------------|--|------------|------------------------------|------------------------|------------------------|--|
| | | | | | ⑩ rodzaj produkту g | | | |
| 1 | acety- len (④) | | < 0.001 | 10.0 | 1.0 | 2.38 | 1.20 | |
| | | | 0.005 | 8.1 | 1.1 | 0.98 | 1.20 | |
| | | | 0.05 | 5.1 | 2.6 | 0.98 | 1.20 | |
| | | | 0.20 | 3.2 | 2.7 | 0.98 | 1.20 | |
| | | | < 0.001 | 15.5 | 1.0 | 2.30 | 1.20 | |
| | | | 0.025 | 10.7 | 1.32 | 2.28 | 0.98 | |
| | | | 0.10 | 6.3 | 2.38 | 0.98 | 1.20 | |
| | | | 0.50 | 4.1 | 4.8 | 0.98 | 1.20 | |
| | | | 0.80 | 2.0 | 4.5 | 0.98 | 1.20 | |
| | | | < 0.01 | 18.0 | 1.0 | 2.20 | 1.20 | |
| | | | 0.010 | 11.2 | 1.23 | 2.21 | 1.10 | |
| | | | 0.050 | 8.0 | 1.28 | 2.10 | 1.10 | |
| | | | 0.20 | 4.8 | 18.5 | 1.99 | 1.10 | |
| | | | 0.50 | 2.3 | 36.5 | 1.97 | 1.10 | |
| | | | 0.0005 | 9.2 | 1.0 | 2.20 | 1.10 | |
| | | | 0.0005 | 12.3 | 1.05 | 2.20 | 1.10 | |
| | | | 0.005 | 6.4 | 2.14 | 2.01 | 1.10 | |
| | | | 0.05 | 3.15 | 2.02 | 1.94 | 1.10 | |
| | | | 0.10 | 1.74 | 5.07 | 1.91 | 1.10 | |
| | | | - | - | 27.7 | 1.0 | 0.71 | |
| | | | | | dwu- tlenek węgla | 0.066 | 13.1 | 0.94 |
| | | | | | | 0.05 | 10.8 | 0.70 |
| | | | | | | 1.2 | 11.9 | 0.91 |
| | | | | | | 4.2 | 12.8 | 0.88 |
| | | | | | | | | 0.01 |

Effects of impurities on ...

Fig. 2. Effect of acetylene on the polymerization of ethylene.

Legend: 1 - Relative consumption of the catalyst for the first series of experiments; 1a - reduced viscosity for the first series of experiments; 2 - relative consumption of catalyst for the second series of experiments; 2a - reduced viscosity for the second series of experiments; 3 - % acetylene; 4 - η_{red} .

Fig. 2.



Rys. 2. Wpływ acetylu na polimeryzację etylenu; 1 — zużycie katalizatora w stosunku do zużycia katalizatora na standardowym etylenie pierwszej serii prób, 1a — lepkosć zredukowana w pierwszej serii prób, 2 — zużycie katalizatora w stosunku do zużycia katalizatora na standardowym etylenie w drugiej serii prób, 2a — lepkosć zredukowana w drugiej serii prób

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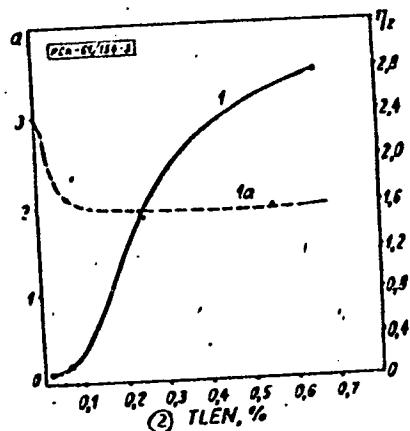
Effects of impurities on ...

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Fig. 3. Effect of oxygen on the polymerization of ethylene.

Legend: 1 - Relative consumption of catalyst; 1a - reduced viscosity; 2 - % oxygen; 3 - η_{red} .

Fig. 3.



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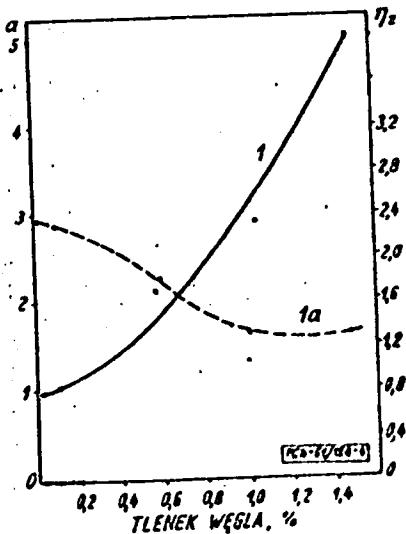
Effects of impurities on ...

Fig. 4. Effect of carbon monoxide on the polymerization of ethylene.

Legend: 1 - Relative consumption of catalyst; 1a - reduced viscosity; 2 - % CO; 3 - η_{red} .

Fig. 4.

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D227/D305



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D227/D305

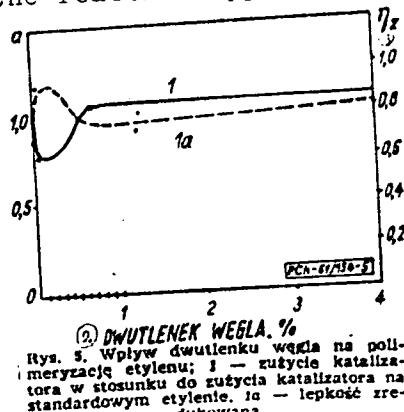
Effects of impurities on ...

cally no effect on α or η_{red} . within the limits of 0.01 - 0.1 %. On increasing the CO content to 0.57 % α is doubled and η_{red} falls by 23 %. High concentrations of CO (1.5 %) increase α by a factor of 5 but do not inhibit the polymerization. Carbon dioxide had no effect on α and η_{red} , although the reaction appeared to be facilitated at 0.66 % CO₂ (Fig. 5).

Fig. 5. Effect of carbon dioxide on the polymerization of ethylene.

Legend: 1 - Relative consumption of catalyst; 1a - reduced viscosity; 2 - % CO₂; 3 - η_{red} .

Fig. 5.



Rys. 5. Wpływ dwutlenku węgla na polimeryzację etylenu; 1 — zużycie katalizatora w stosunku do zużycia katalizatora na standardowym etylenie, 1a — lepkość zredukowana

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D227/D305

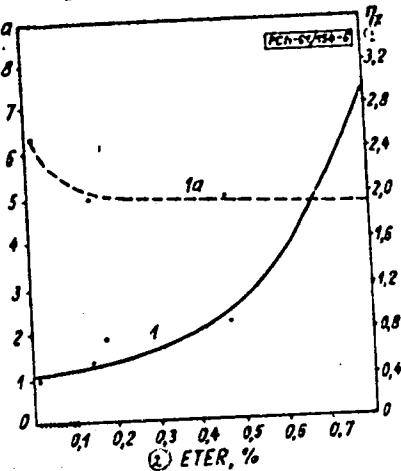
Effects of impurities on ...

The effects of diethyl ether are shown in Fig. 6

Fig. 6. Effect of ether on the polymerization of ethylene.

Legend: 1 - Relative consumption of catalyst; 1a - reduced viscosity; 2 - % ether; 3 - η_{red} .

Fig. 6.



Rys. 6. Wpływ eteru na polimeryzację etylenu; 1 — zużycie katalizatora w stosunku do zużycia katalizatora na standardowym etylenie, 1a — lepkosć zredukowana

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Effects of impurities on ...

and summarized in Table 2.

Table 2.

Legend: 1 - Series; 2 - impurities in ethylene; 3 - type;
4 - amount, mg/l - % wt.;
5 - yield of polymer g; 6 - relative consumption of catalyst
a; 7 - η red.; 8 - remarks;
9 - ether; 10 - water; 11 - sample turned green.

Tablica 2

| Seria | (3) rodzaj | Zanieczyszczenia etylenu (4) | | Względne zużycie kataliza- tora a | η red. | Uwagi |
|-------|---------------|---------------------------------|---------------------|---|----------------|---|
| | | (2) Ilość mg/l | (4) Ilość % wag. | | | |
| 1 | Eter (9) | 0,25 | 0,02 | 6,7 | 1,0 | 2,57 |
| | | 1,92 | 0,15 | 5,2 | 1,35 | 2,03 |
| | | 2,25 | 0,18 | 4,8 | 1,03 | 2,01 |
| | | 5,91 | 0,47 | 4,5 | 2,20 | 1,90 |
| 2 | Woda (10) | 10,28 | 0,82 | 1,2 | 7,71 | 1,89 |
| | | 13,93 | 0,82 | blady | | próbka przy- brata barwy zielonej |
| | | 0,56 | 0,045 | 7,6 | 1 | 1,66 |
| | | 2,22 | 0,170 | 1,25 | 5,81 | 1,11 |
| | | 4,05 | 0,324 | 1,25 | 5,82 | 1,19 |
| | | 4,31 | 0,343 | 1,12 | 6,22 | 1,11 |
| | | 9,8 | 0,763 | 1,18 | 6,23 | 0,80 |
| | | | | | | |

Table 2.

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Effects of impurities on ...

The relative consumption of the catalyst is practically unaffected by ~0.1 % but is doubled by 0.18 % Et₂O, and 0.8 % ether stopped the reaction. Reduced viscosity decreased only slowly with increasing ether content (by 24 % at 0.82 % Et₂O). Quadrupling the moisture content of ethylene raised $\eta_{red.}$ by a factor of 5 and reduced $\eta_{red.}$ by 30 % (Table 2 and Fig. 7), as well as promoting ash formation with the polymer. The authors admit that the results of Breslow (Ref. 2: Op.cit.) and Topchiyev (Ref. 3: Op.cit.) have not been confirmed, possibly due to differences in the monomers, catalysts and methods. Catalyst concentrations within 0.18 - 0.50 % by weight are sufficient to polymerize ethylene efficiently, even in the presence of 0.01 % C₂H₂, 0.02 % O₂, 0.1 % CO, 0.15 % ethers and 0.05 % of water.

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Effects of impurities on ...

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D227/D305

Fig. 7. Effect of water on the polymerization of ethylene.

Legend: 1 - Relative consumption of catalyst; 1a - reduced viscosity; 2 - % water; 3 - η red.

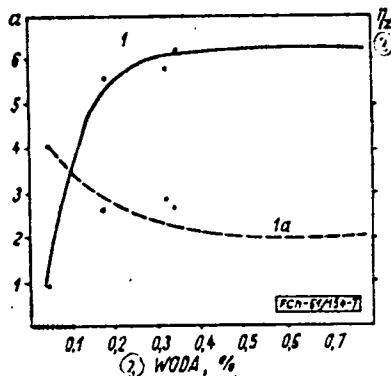


Fig. 7.

Rys. 7. Wpływ wody na polimeryzację etylenu; 1 — zużycie katalizatora w stosunku do zużycia katalizatora na standardowym etylenie, 1a — lepkość zredukowana

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Effects of impurities on ...

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D227/D305

There are 2 tables, 7 figures and 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: D.S. Breslow, J. Am. Chem. Soc., 79, 5072 5072, 1958.

ASSOCIATION: Zakład olefin instytutu ciężkiej syntezy organicznej, blachownia Śląska (Olefin Department of the Heavy Organic Synthesis Institute, Silesia Sheet-Iron Works)

Card 14/14

OBLOJ, Jozef

Major trends in research in the field of petroleum chemistry in the world and in Poland. Przem chem 41 no.1:11-14 Ja '62.

1. Instytut Ciezkiej Syntezy Organicznej, Blachownia Slaska.

37212
P/014/62/041/004/003/004
D204/D301

15,8060

AUTHORS: Bereś, Janusz, Obłój, Józef, Szczurek, Maria, and Korkoszka, Janina

TITLE: Preparing stable catalysts for the polymerization of olefins without pressure

PERIODICAL: Przemysł chemiczny, v. 41, no. 4, 1962, 217

TEXT: Patent no. 45141; class 59c, 25/01. Property of Instytut ciężkiej syntezy organicznej (Institute of Heavy Organic Synthesis) Metal Sheet Plant, Silesia. The patent describes a method of preparing stable catalysts for the polymerization of olefins without pressure. The process is based on the interaction between an organo-metallic compound and chlorides of metals from Groups IV-VI of the periodic table. The reaction is conducted in a stable molten hydrocarbon with a m.p. $> 50^{\circ}\text{C}$ and the product is then solidified under nitrogen into appropriate forms. The patent dates from July 6, 1959.
[Abstractor's note: Complete translation]. X

Card 1/1

OBIOL, Jozef, dr

The work of the Institute of Heavy Organic Synthesis in Bielszowina
Silesia. Review Pol Academy 9 no.3:37-39 Jl-S '64.

1. Director, Institute of Heavy Organic Synthesis, Bielszowina
Silesia.

/

L 45509-65 EPP(c)/EWP(j)/T PC-4/pr-4 RM

ACCESSION NR: AP5014785

PO/0002/64/000/004/0143/0152

AUTHOR: Obloj, Jozef (Professor, Director) (Blauchownia Slaska)

20
19
8TITLE: Activities at the Institute of Heavy Organic Synthesis in Blauchownia
Slaska

SOURCE: Nauka Polska, no. 4, 1964, 143-152

TOPIC TAGS: chemical research facility, carbon, petroleum, aromatic hydrocarbon

Abstract: The article reports on the activities of the Institute which is under the jurisdiction of the United Chemical Synthesis Industry and provides the latter with whatever research is required. Major work is done in petrochemistry and in carbon derivatives. The organization of the Institute is described first, then the specific research projects are discussed in detail. These fall into three main categories: 1) chemical processing of lower-order olefines, 2) synthesis of detergents from petrochemical raw materials and synthesis of certain materials for the textile industry, and 3) extraction and purification of aromatic hydrocarbons from the coal tar and chemical transformation of multi-ring aromatics. The following reactions are being performed: oxidation of hydrocar-

Card 1/2

L 45509-65

ACCESSION NR: AP5014785

bons, polymerization and polycondensation, alkylation and sulphonation, high-pressure catalytic reduction, separation of hydrocarbons by azeotropic distillation or zonal crystallization. Analytic methods have been developed here, such as gas chromatography, polarography and spectrophotometry. The Institute engages in publications, patent disclosures, educational training and scientific-technical collaboration with others. Orig. art. has 4 figures.

ASSOCIATION: Instytut Ciezkich Syntezy Organicznej, Blachownia Slaska
(Institute of Heavy Organic Synthesis)

SUBMITTED: OOFeb64

ENCL: 00

SUB CODE: PP, GC

NO REF SOV: 000

OTHER: 000

JPRS

Card 2/2 *m8*

RUMANIA / Chemical Technology, Chemical Products and H
Their Application, Part 3. - Wood Pulp Ind-
ustry, Hydrolysis Industry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 62365.

Author : P. Obloja.

Inst : Not given

Title : Upon the Possibility of Using Radioactive Iso-
topes in Wood Industry.

Orig Pub: Ind. Iemn., 1958, 7, No 2, 57-65.

Abstract: The application of radioactive isotopes to the determination of thickness and weight of various wood materials, and of the wood moisture, to the acceleration of the sizing process, etc. was studied. Observations of the movement of various substances (water, fungicides, dyes) in wood, the control of finishing uniformity of the outside surface of materials, various chemical

Card 1/2

OBLOJA, P.

TECHNOLOGY

Periodicals: INDUSTRIA LEMNULUI. Vol. 7, no. 10, Oct. 1958

OBLOJA, P. Television in the service of the wood industry. p. 367

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2,
February 1959, Unclass.

CONFIDENTIAL

AUTHOR: RESHETNIKOV, F.G., OBLOMEYEV, S.N. PA - 3025
TITLE: On the Mechanism of the Production of the Zirconium Fungus in the
Magnesia-Thermal Production Process of Zirconium. (O mekhanizme
obrazovaniya tsirkoniyevoy gubki pri magniyettermicheskem protsesse
polucheniya tsirkoniya, Russian)
PERIODICAL: Atomnaya Energiya, 1957, Vol 2, Nr 5, pp 459-462 (U.S.S.R.)
Received: 6 / 1957 Reviewed: 7 / 1957

ABSTRACT: First, two previous works are discussed in short. The present investigation permits the following assumptions to be drawn concerning the order and the mechanism of the production of the various parts of the zirconium fungus: In the initial stage of the reduction process chlorine zirconium (zirconium chloride) reacts with magnesia on the surface of a molten magnesia vat. Reaction takes place mainly on the walls of the vat. The zirconium produced at this moment absorbs the admixtures of oxygen and nitrogen (zirconium is a good getter) from the gaseous medium. The zirconium sinks to the bottom of the vat where it forms the ground fungus; a small part of the zirconium remains on the walls of the vat where it forms the lateral fungus. The reaction of the magnesia vapors with the zirconium chloride in the initial stage of the process can be inhibited if the heating of the reaction vat with the magnesia remains comparable with the entering

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PA - 3025

On the Mechanism of the Production of the Zirconium Fungus in the
Magnesia-Thermal Production Process of Zirconium.

of zirconium chloride (The last phrase is not clear, possibly because a word is missing in the original text. The reviewer). In the opposite case a black powder is formed ($Zr + MgCl_2$). In the following stage the upper part of the fungus is produced. The growth of this part towards the top takes place more rapidly than the lifting of the level of the molten vat of metallic magnesia and magnesia chloride. Various circumstances indicate the following: The magnesia, by which the zirconium is well moistened, raises to the top as a result of the capillary effect of the zirconium fungus and develops on its highly developed surface with the vapors of the zirconium chloride, so that the zirconium fungus gradually and continuously grows towards the top. - The authors confirm this mechanism by using magnesia with a 3% aluminum content (or with a lower content of tin). The ideas discussed permit a better selection of the optimum temperature of the vat and the evaporator as well as an increase of the yield of high-quality zirconium fungus. (2 Illustrations and 1 Table).

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED: 14.11.1956
AVAILABLE: Library of Congress
Card 2/2

AUTHORS: Reshetnikov, F.G., Oblomeyev, Ye.N. 89-4-4.3/28

TITLE: The Investigation of the Velocity of the Magnesium-Thermic Process in Zirconium Production (Izuchenije skorosti magniyetermicheskogo protessa polucheniya tsirkoniya)

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 4, pp. 349-353 (USSR)

ABSTRACT: The apparatus is described by means of which velocity of the magnesium-reduction process was investigated. The level of the melt $MgCl_2 + KCl$ is measured by means of a γ -gauging device (Co^{60}). The vapor pressure of zirconium chloride in the reduction apparatus was measured by means of an ordinary manometer. The manometer is connected with the interior of the reduction vessel by means of an opening- and closing device with liquid tin. Measurements showed that during evaporation (heating up to $450^{\circ}C$), the temperature of zirconium chloride does not exceed $330^{\circ}C$ during the magnesium-reduction process. The average velocity of the entire reduction process of zirconium chloride increases with a temperature increase in the crucible from 700 to $850^{\circ}C$, i.e. more slowly than with a temperature in-

Card 1/2

The Investigation of the Velocity of the Magnesium-Thermic
Process in Zirconium Production

89-4-4-3/28

crease from 460 to 490°C.

The decisive factors in zirconium production therefore are the evaporation temperature and the vapor pressure of zirconium chloride. There are 5 figures, and 2 references.

SUBMITTED: May 29, 1957

- 1. Zirconium--Production
- 2. Zirconium--Temperature factors
- 3. Zirconium chloride--Reduction
- 4. Zirconium chloride--Vapor pressure
- 5. Magnesium--Thermal effects

Card 2/2

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001237710010-9

OBLOMOV, A., inzh.

Decibels and nepers. Tekh. i vooruzh. no.2:26-29 F 16.
(MKA 17.9)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001237710010-9"

OBIOMSEKAYA, I.

The enterprise fund. Vop. ekon. no.12:82-90 D '59.
(MIRA 12:12)
(Bonus system) (Industrial management)

UBLOVSKAYA, Inga Yakovlevna; BUTARINA, V., red.; LAPIDUS, L.,
slad. red.

[Material self-interest as an economic category of socialism;
Material'naya zainteresovannost' - ekonomicheskaya kategorija
sotsializma. Moskva, Izd-vo "Mysl', 1964. 92 p.
(MLA 17;8)

OBLOMSKAYA, L.

Establishment and use of funds of enterprises. Sots. trud. no.6:
54-58 Je '58. (MIRA 11:6)
(Industry--Finance)

MEDVEDEV, I.G., inzh.; MUZYKANTOV, S.P., inzh.; OBLOMSKAYA, N.I., inzh.

Efficient systems of deepening shafts in the opening-up of
lower levels. Trudy KuzNIIshakhtstroia no.1:6-19 '63.
(MIRA 17:8)

MURAV'YEV, Vasiliy Petrovich; DMITRIYEV, Gennadiy Andreyevich;
FILATOV, Mikhail Nikolayevich; SAFOKHIN, Mikhail Samsonovich;
GOL'DBERG, Leonid Abramovich; KRUT'KO, Mariya Vladimirovna;
NECHAYEV, Vadim Ivanovich; KOLCHANOV, Vitaliy Dmitriyevich;
BESSONOV, Yevgeniy Aleksandrovich; OBLOMSKIY, Ivan Yefimovich;
KORABLEV, A.A., otv. red.; ABRAMOV, V.I., red. izd-va;
PROZOROVSKAYA, V.L., tekhn. red.

[Automation in the coal mining industry] Avtomatizatsiya v
ugol'noi promyshlennosti. [B] V.P.Murav'ev i dr. Moskva,
Gosgortekhizdat, 1962. 258 p. (MIRA 15:10)
(Coal mines and mining) (Automation)

OBLOMSKIY, Ya. A.

PHASE I BOOK EXPLOITATION

SOV/5323

Bannyy, Nikolay Pavlovich, Viktor Borisovich Brodskiy, Iosif
Grigor'yevich Gorelik, Yakov Antonovich Oblomskiy, Vyacheslav
Viktorovich Rikman, and Lazar' Nisonovich Roytburd

Ekonomika chernoy metallurgii SSSR (Economics of Ferrous Metallurgy
in the USSR) Moscow, Metallurgizdat, 1960. 566 p. Errata
slip inserted. 5,700 copies printed.

Eds. (Title page): I. P. Bardin, Academician (Deceased), Ya. A.
Oblomskiy, Docent, and V. V. Rikman, Docent. Ed. of Publishing
House: Ye. S. Khutorskaya; Tech. Ed.: A. I. Karasev.

PURPOSE : This textbook is intended for students at metallurgical
schools of higher education, in divisions of metallurgy at
schools of higher technical education, and at engineering and
economic schools of higher technical education. It may also
be useful to engineering, technical, planning, and economic
personnel in scientific, economic, and planning bodies, and
in industry.

Card 1/16

Economics of Ferrous Metallurgy (Cont.)

SOV/5323

COVERAGE: The book discusses the role of ferrous metallurgy in the Soviet national economy. Principal laws of the development of ferrous metallurgy, the organization of management, planning principles, and problems of raw-material and fuel-and-power supply bases are examined. Considerable attention is given to the problem of technical progress and its effect on the economics of blast-furnace, steelmaking, and rolling production. The development of ferrous metallurgy in the Soviet Union, capitalist countries, and People's Democracies is briefly described. The introduction and Chs. 13,14, and 15 were written by Ya. A. Oblomskiy, Candidate of Economic Sciences, Docent, Moskovskiy gosudarstvennyy ekonomicheskiy institut (Moscow State Institute of Economics); Chs. 1,2,3,4,11 (Sections 3,4, and 5), and 12, by I. G. Gorelik, Candidate of Economic Sciences, Docent, Moskovskiy inzhenerno-ekonomicheskiy institut (Moscow Institute of Engineering Economics); Chs. 5,20,21, and 22, by L. N. Roytburd, Doctor of Economic Sciences, Professor, Moscow Institute of Engineering Economics; and Chs. 6,9, 11 (Sections 1 and 2), 18, 19,23, and 24, by N. P. Bannyy, Candidate of Economic Sciences, Docent, Moskovskiy institut stali (Moscow

Card 246

Economics of Ferrous Metallurgy (Cont.)

SOV/5323

Steel Institute), V. V. Rikman, Candidate of Economic Sciences, Docent, Moscow Steel Institute, and V. B. Brodskiy, Candidate of Economic Sciences, Gosudarstvennyy institut proyektirovaniya metallurgicheskikh zavodov (State Institute for the Design and Planning of Metallurgical Plants), wrote Chs. 7,8, and 17 and Chs. 10 and 16, respectively. According to the Foreword, the book is based on Soviet and non-Soviet materials. The authors thank the Department of the Economics and Organization of Ferrous Metallurgy Enterprises of the Ural Polytechnic Institute, directed by A. S. Osintsev, Doctor of Economic Sciences, Professor, and L. I. Ulitskiy, Doctor of Economic Sciences, Professor. There are no references.

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BERKI, L.Ya., doktor ekon. nauk, prof.; MAKSIMOV, I.S.; BRAGINSKIY,
B.I., kand. ekon. nauk, dots.; GERASHCHENKO, B.S., kandi.
ekon. nauk; GRIGOR'YEV, A.Ye., doktor ekon. nauk, prof.;
ITIN, L.I., doktor ekon. nauk, prof.; LOKSHIN, E.Yu., doktor
ekon. nauk, prof.; KAHENITSER, S.Ye., doktor ekon. nauk, prof.;
OBLOMSKIY, Yu.A., kand. ekon. nauk, dots.; SOKOLOV, B.M.,
doktor ekon.nauk, prof.; SHASS, M.Ye., doktor ekon.nauk;
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[Economics of socialist industry; textbook]Ekonomika sotsiali-
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B.S.Gerashchenko. 2., dop. i perer. izd. Moskva, Gospolitiz-
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[Economics of ferrous metallurgy in the U.S.S.R.] Ekonomika chernoi metallurgii SSSR. [By] V.F. Andreev i dr. Pod red. L.N. Roitburda i N.P. Bannogo. Moskva, Metallurgizdat, 1963.
384 p. (MIRA 16:5)

(Iron industry) (Steel industry)

BERRI, L.Ya., doktor ekon. nauk, prof.; MAKSIMOV, I.S.; BRAGINSKIY, B.I., doktor ekon. nauk; GRIGOR'YEV, A.Ye., doktor ekon. nauk, prof.; ITIN, L.I., doktor ekon. nauk, prof.; LOKSHIN, E.Yu., prof.; KAMENITSER, S.Ye., doktor ekon. nauk, prof.; OBLOMSKIY, Ya.A., kand. ekon. nauk, dots.; SHASS, M.Ye., doktor ekon.nauk, prof.; STEPANOV, A.Ya.; ULITSKIY, L.I., prof., doktor ekon. nauk; PODGORNOVA, V., red.; TROYANOVSKAYA, N., tekhn. red.

[Economics of socialist industry] Ekonomika sotsialisticheskoi promyshlennosti; uchebnik. 3., dop. i perer. izd. Pod red.L.I. Itina. Moskva, Gospolitizdat, 1963. 646 p. (MIRA 16:8)

1. Moscow. Gosudarstvennyy ekonomicheskiy institut. 2. Zaveduyushchiy kafedroy ekonomiki promyshlennosti Moskovskogo instituta narodnogo khozyaystva im.G.V.Plekhanova (for Itin).
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nauk; OBLOMSKIY, Ya.A., kand. ekon. nauk; SAVINSKIY,
E.S., kand. ekon. nauk; KHEYNMAN, S.A.. doktor ekon.
nauk, red.; MOSKVIN, D.D..kand.ekon.nauk, nauchn.red.:
ORLOV.N.A..prof.,red.; SAZANOVICH,N.K.,mlad.red.; SIMKINA,
G.S.,mlad.red.

[U.S.A. industry in 1929-1963; technical and economic trends
and structural changes] Promyshlennost' SShA v 1929-1963 gg.,
tekhniko-ekonomicheskie tendentsii i strukturnye sdvigи. [By]
L.IA.Berri i dr. Moskva, Ekonomika, 1965. 406 p.
(MIRA 18:5)

OBLOMOV, Aleksandr Fedorovich; TOKAREV, Lev Alekseyevich;
MOMOT, Evgeniy Grigor'yevich; SHAMSHUR, V.I., red.

[Problems of the selectivity of radio receivers] Voprosy
izbiratel'nosti radiopriemnikov. Moskva, Energija, 1965.
(MIRA 18:2)
102 p.

OBLONCZEK, Gerard

The frequency of cervical spine injuries in motorcycle accidents.
Chir. narzad. ruchu ortop. Pol. 28 no.7:803-806 '63
1. z Oddzialu Ortopedyczno-Urazowego Szpitala Wojewodzkiego w
Opolu (Ordynator dr. W. Arst).

OBLONCZEK, Gerard

Four-year survival after anatomical resection of distal half
of the femur for chondrosarcoma. Chir. narzad. ruchu ortop.
Pol. 28 no.7:1033-1036 '63

1. Z Oddzialu Chirurgii Ortopedycznej Szpitala Wojewodzkiego
w Opolu (Ordynator: dr. W. Arct).

S/271/63/000/001/033/047
D413/D308

AUTHORS: Černý, Václav, Marek, Jindřich, M. and Oblonský, Jan

TITLE: A Czech-produced automatic computer

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 1, 1963, 30, abstract 1B167 (Stroje na zpracov. inform., v. 2, 1954, 11-92 (Czech: summaries in Rus. and Eng.))

TEXT: The authors describe the SAPO relay-type automatic computer with a 5-address command system and magnetic drum memory (1024 52-digit words). The computer contains 7000 relays and 400 electron tubes, has 3 arithmetic units, and works on a binary system with floating binary and decimal points. The structure of the computer excludes the effect of random errors on the correctness of the result of computation. Descriptions are given of the command system, the memory, the control equipment, the input and output equipment and the arithmetic unit, with a survey of the basic operations. 4 references.

Abstracter's note: Complete translation

Card 1/1

OBLONSKY, JAN.

Oblonský, Jan. Electromagnetic relay with suppressed
inductive coupling between windings. *Stroje na Zprávy*
Sování Informací 2, 261-270 (1954). (Czech, Russian
and English summaries)

1 - F/W
Machine for Processing
Information

ATIC Trans., ATIC-3063-58, F=TS 1012p/V

AF

CONFIDENTIAL JAN

Cerny, Václav; and Ohraecký, Jan. Machine for computation of crystal structure factors. Stroje na Zpracování Informací 3 (1955), 31-47. (1956). (Czech, Russian and English summaries)

A special-purpose digital computer with built-in

instructions has been constructed for the computation of crystal structure factors. The three-dimensional atomic co-ordinates are read in through a keyboard. The Miller indices and the atomic scattering factors are read in by Powers punched cards. The squares of the moduli of the calculated and observed structure factors (the latter being punched on the same cards as the Miller indices) are compared and a disagreement function

$$W = \sum_{i=1}^{M-1} |K_{i+1} - K_i|$$

is computed, where M is the total number of reflections and the ratios $K_i = F_e^2/F_0^2$ refer to the i th reflection with Miller indices k_x, k_y, k_z . The input coordinates are varied by trial and error until a sufficiently low value of W is obtained.

The machine uses about 1100 relays and works with binary numbers, at the rate of 40 arithmetic operations per second. The results can be printed on the attached printer. A flowdiagram and diagrams of some of the relay

Černý, Václav; and Obložský, Jan
circuits used for multiplication and sine-cosine genera-
tion are given. The machine works in the space-group P1
and has capacity for 60 atoms.

V. Vand.

CC
72

3

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OBLONSKIY, J.

Oblonsky, Jan. Machine for Fourier synthesis. Stroje na Zpracovani Informaci 3 (1955), 42-59 (1956).
(Czech, Russian and English summaries)

A machine for crystallographic Fourier summation has been built, using a card sorter, an adding unit and a printer. It operates on the principle of Beevers-Lipson strips; a library of 74,400 punched cards is prepared, each card carrying sines or cosines for one Miller index \mathbf{h} (range from 1 to 15), multiplied by the amplitude A or B (range in binary from -1023 to +1023), for 30 values of x (range 0 to 119/120 of the cell edge). The punched cards are of the Powers type. The numbers are in binary. Each card is reproduced ten times. The sorter is used as a binary card reader and not for sorting. The brush pulses are added progressively in the adder. Special cards cause the total to be printed and counter cleared. In this way, the sums

$$A_i \cos 2\pi x_i \text{ or } B_i \sin 2\pi x_i$$

are accumulated for the values of x_i given by the position of the brush of the sorter. Calculation of one Fourier map with a 120 x 120 grid takes about 34 machine hours. Hand picking of the cards takes about 22.5 hours. Cards begin to wear out after about 200 passages through the machine.

OC

Y1

V. Vand (University Park, Pa.)

J

(S)

OBLONSKY, J.

Methods of testing connections in the construction of the automatic computer
SAFO. p. 137. (STROJE NA ZPRACOVANI INFORMACI, Vol. 4, 1956, Praha, Czechoslovakia)

SJ: Monthly List of East European Accessions (EEL) LC, Vol. 6, No. 12, Dec 1957. uncl.

OBLONSKY, JAN

S/271/63/000/001/036/047
D413/D308

AUTHORS: Chlouba, Václav and Oblonský, Jan

TITLE: A switching matrix for commutation of the heads of a magnetic-drum memory

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 1, 1963, 40, abstract 1B222 (Czech pat., cl. 42 m, 14, no. 99010, Mar. 15, 1961)

TEXT: The patent covers a design of switching elements for commutation of the heads of a magnetic drum. Each such element consists of a transformer whose secondary has a center-tap, to which the output of the recording amplifier is connected. The two ends of the winding are connected through diodes to two busses which are connected with an electronic rectifier. These same busses are connected through a symmetrizing resistor network to the input of the reproducing amplifier. During recording, current pulses of various polarity are induced in the windings of the transformer.

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S/271/63/000/001/036/047
D413/D308

A switching matrix ...

During playback, the output signal from the head appears at the input of the playback amplifier provided the corresponding diode is cut-on by a voltage pulse applied to the center-tap of the transformer secondary. 1 figure.

Abstracter's note: Complete translation]

Card 2/2

ACCESSION NR: AT4040379

Z/2503/63/000/009/0015/0024

AUTHOR: Oblonsky, Jan (Oblonsky*, Jan); Svoboda, Antonin

TITLE: Logical design of a data-processing system with built-in time-sharing

SOURCE: Ceskoslovenska akademie ved. Vyzkumny ustav matematickych stroju. Stroje na zpracovani informaci, no. 9, 1963, 15-24

TOPIC TAGS: data processing system, digital computer, time sharing, process control

ABSTRACT: EPOS is a general-purpose digital computing system designed for applications in data processing, scientific computations, and process control. Its logical design was intended to meet two requirements: a modular structure and time-sharing facilities (internal and external), the latter being achieved entirely through built-in circuitry. The system consists of a central computing logic unit and peripheral units connected by buses so that practically any number of input-output devices and magnetic tape units can be connected simultaneously to the central unit. Up to five independent

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ACCESSION NR: AT4040379

programs can be run at the same time and parallel processing in the central unit permits simultaneous execution of several operations in the same program (internal parallel time-sharing). The central unit includes a special organizing unit which automatically switches on or blocks programs according to priorities assigned the programs. The system of priority values ensures maximum use of the central unit and the other units of the system. Orig. art. has: 4 figures and 1 table

ASSOCIATION: Research Institute of Mathematical Machines, Praha

SUBMITTED: 12Sep62 DATE ACQ: 18Jun64 ENCL: 03

SUB CODE: DP, CP NO REF Sov: 000 OTHER: 000

Card 2/5

ACCESSION NR: AT4040379

ENCLOSURE: 01

System with Built-in Time-sharing

TABLE I
The General Characteristics of the EPOS System.

CENTRAL COMPUTER

General purpose stored program digital computer:

Word: One word — sign, 11 decimals

- sign, 9 decimals (mantissa), 2 decimals (exponent)
- 6 alphanumeric characters
- instruction with 1 full and 3 short addresses;

Two words — 12 alphanumeric characters.

Operating possibilities:

- 9 universal registers for address modification
- indirect addressing
- over 100 operations comprising: fixed and floating point arithmetic, accumulation of products with double precision, three-address operations between the universal registers, shifts, normalizations, masking, conditional jumps, subroutine jump, peripheral equipment control etc.

Card 3/5

ENCLOSURE: 02

ACCESSION NR: AT4040379

Table I (Cont'd)

Operation times including access to the working memory:

Internal Time-Sharing: Without:

With:

| Point: | Fixed: | Floating: | Fixed: | Floating: |
|----------------|----------------|----------------|--------------|---------------|
| Addition | 52 μ sec | 130 μ sec | 52 μ sec | 130 μ sec |
| Multiplication | 208 μ sec | 234 μ sec | 65 μ sec | 104 μ sec |
| Division | 1196 μ sec | 1209 μ sec | 52 μ sec | 91 μ sec |

- Operators console: — starting and stopping of programs
- signalling of the states of programs
- assignments of the memory sections to programs.

Working memory: — extendible magnetic core memory from 1000 words up to 40 000 words.

Checking: — automatic error correction during transfers between the memories and the central computer

— automatic error detection in the central computer.

Time-sharing: External — up to five independent programs may be executed simultaneously

Internal — other operations may be performed in parallel with the multiplication or division.

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ACCESSION NR: AT4040379

ENCLOSURE: 03

Table I (Cont'd)

MEMORIES

- Magnetic drum backing memory - extendable, with 5000 words per drum up to 50 000 words.
- Magnetic tape memory - 5000 decimals per second, up to 20 units per program, operating in parallel.

INPUT and OUTPUT

- card reading unit, tape reading unit, tape punching unit, line printer, typewriter etc.
- units of the peripheral equipment may be connected to the system according to the needs of the individual user
- the system is capable of further expansion by adding new equipment as yet specified.

Card 5/5

OBLONSKY, Jan, inz. CSc.; OUTRATA, Edvard, promovany ekonom.
Selection of the set of the Epos automatic computer. Podn.
org 17 no.9:421-424 S'63
1. Vyzkumny ustav matematickych stroju, Praha.

L 44754-66 FWP(1) IJP(c) BB/GG/JXT(BE)
ACC NR. AF6020175 (A) SOURCE CODE: CZ/0078/66/000/002/0015/0015

INVENTOR: Oblonsky, Jan (Engineer, Candidate of Sciences) (Prague)

40

ORG: none

B

TITLE: (A digital computer in which the input word length is modified)

SOURCE: Vynalezy, no. 2, 1966, 15

TOPIC TAGS: digital computer, digital computer system, digital decoder

ABSTRACT: A digital computer in which the length of the word entering the operating unit itself is modified, or in which the word exiting from this unit is modified is described which has the distinguishing feature that the modifying device which is positioned between the memory and the operating unit of the computer is designed in such a way that to the shift register with the connected shift circuit is connected the tuned circuit which is connected either with the shift circuit or with the operating unit itself. The tuned circuit is connected with at least one masking register and by a counter circuit coupled through gates with the control generator of supplementary digits, in particular of zero, or with elements of the shift register. At the same time the input counter circuit, which is connected to an element of the shift register, is coupled through gates with the supplementary digit generator or with the operating unit itself of which the gates are connected to the tuned circuit.

SUB CODE: 09 SUBM DATE: 15Jul63

Card 1/1

OBLOV

ZELEZNYAK, I., inzh.; YEZERSKIY, A., inzh.; OBLOV, V., inzh.

Plastic facing tiles. Gor. i sel'. stroi. no.11:18-19 N '57.
(Tile construction) (Plastics) (MIRA 11:1)

OBLOVATSKAYA, R. N.

Dissertation: "Development of a method for obtaining taste-like food emulsions."
Cand. Tech. Sci., Moscow Institute of National Economy imeni G. I. Plekhanov, Moscow,
1953. (Referativnyy zhurnal-animiya, no 9, Moscow, May 54.)

SO: SUZ 313, 25 Dec 1954